IN THE CLAIMS

Please amend claims 1 and 3 as shown below.

Claim 1 (Currently Amended) A gradient coil assembly for use in an MRI device, comprising:

a gradient tube extending along an axis, the tube including first and second gradient coils and a conductive compound disposed between the first and second gradient coils, the conductive compound being a glue having a plurality of conductive particles disposed substantially uniformly within the glue, at least a portion of the plurality of conductive particles being in a range of 1-10μm in diameter, the plurality of conductive particles configured to limit a current flowing through the conductive compound to less than 10 microamps to reduce electrostatic discharges in the glue.

Claim 2 (Previously Presented): The gradient coil assembly of claim 1 wherein the glue comprises an epoxy resin.

Claim 3 (Currently Amended): The gradient coil assembly of claim 1 wherein the conductive particles comprise ~~one of~~ carbon particles~~, silver particles, copper particles, and gold particles~~.

Claim 4 (Previously Presented): The gradient coil assembly of claim 1 wherein the conductive compound further includes a chemical hardening compound.

Claim 5 (Original): The gradient coil assembly of claim 2 wherein the epoxy resin comprises a bisphenol-A resin.

Claim 6 (Previously Presented): The gradient coil assembly of claim 1 wherein the glue comprises a polyester resin.

Claim 7 (Original): The gradient coil assembly of claim 6 wherein the conductive particles comprise one of carbon particles, silver particles, copper particles, and gold particles.

Claim 8 (Previously Presented): The gradient coil assembly of claim 6 wherein the conductive compound further includes a chemical hardening compound.

Claim 9 (Cancelled).

Claim 10 (Cancelled).

Claim 11 (Cancelled).

Claim 12 (Previously Presented): A gradient coil assembly for use in an MRI device, comprising:

a gradient tube extending along an axis, the tube including first and second gradient coils and a potting compound layer disposed between the first and second gradient coils, the potting compound layer having a plurality of conductive particles configured to limit a current flowing through the potting compound layer to less than a predetermined current value to reduce electrostatic discharges in the potting compound layer, the plurality of conductive particles being at least one of silver particles and gold particles.

Claim 13 (Previously Presented): A method for assembling a gradient coil assembly, comprising:

disposing a first gradient coil on a first gradient tube; and

disposing a conductive compound between the first gradient coil and a second gradient coil, the conductive compound being a glue having a plurality of conductive particles therein, at least a portion of the plurality of conductive particles being in a range of 1-10μm in diameter, the plurality of conductive particles configured to limit a current flowing through the conductive compound to less than a predetermined value to reduce electrostatic discharges in the glue, the conductive compound further having a chemical hardening compound therein.

Claim 14 (Previously Presented): The method of claim 13 wherein the disposing the conductive compound includes vacuum impregnating the conductive compound between the first and second gradient coils.

Claim 15 (Previously Presented): The method of claim 13 wherein the glue comprises an epoxy resin.

Claim 16 (Cancelled).

Claim 17 (Original): The method of claim 15 wherein the conductive particles comprise one of carbon particles, silver particles, copper particles, and gold particles.

Claim 18 (Previously Presented): The method of claim 13 wherein the glue comprises a polyester resin.

Claim 19 (Cancelled).

Claim 20 (Cancelled).

Please add new claims 21-24.

Claim 21 (New): A gradient coil assembly for use in an MRI device, comprising:

a gradient tube extending along an axis, the tube including first and second gradient coils and a conductive compound disposed between the first and second gradient coils, the conductive compound being a glue having a plurality of conductive particles dispersed substantially uniformly within the glue, at least a portion of the plurality of conductive particles being in a range of 1-10μm in diameter, the plurality of conductive particles configured to limit a current flowing through the conductive compound to less than 10 microamps to reduce electrostatic discharges in the glue, the conductive particles being one of silver particles, copper particles, and gold particles.

Claim 22 (New): The gradient coil assembly of claim 21 wherein the glue comprises an epoxy resin.

Claim 23 (New): The gradient coil assembly of claim 22 wherein the epoxy resin comprises a bisphenol-A resin.

Claim 24 (New): The gradient coil assembly of claim 21 wherein the glue comprises a polyester resin.